

AMENDED CLAIM SET

1. (Currently Amended) A ship hull construction with a low-block coefficient for a marine vessel, comprising a bow section, a mid-section with a substantially tumblehome shape and a stern section, in which the mid-section has a curved outer shape in the longitudinal direction so that, as viewed in transverse cross section, the cross-section becomes smaller toward the bow and stern sections, and includes an inner section with one of framing means and longitudinal bulkhead means, said hull construction having outer shells made of composite materials.

2. (Currently Amended) A marine vessel according to claim 1, wherein the inner mid-section includes a steel frame which, together with deck means and keel means, carries the ~~sea loads~~ hull girder loads.

3. (Original) A marine vessel according to claim 1, in which the mid-section includes inner longitudinal bulkhead means which are of one of conventional or modified double-hull construction.

4. (Currently Amended) A marine vessel according to claim 1, wherein the starboard and port sides of the mid-section are made of one of continuous composite shells or panels with a hybrid light frame means at the inside thereof to carry water pressure loads and transmit resulting loads through the deck means to the inner section.

5. (Currently Amended) A marine vessel according to claim 1, wherein the mid-section includes outer shells made of glass-reinforced plastic composite materials.

6. (Original) A marine vessel according to claim 5, wherein said composite materials are one of E- or S-2 glass fiber composites.

7. (Original) A marine vessel according to claim 5, wherein the outer shells are supported on the inside thereof by a stainless steel light framing stiffener means for transmitting pressure loads.

8. (Currently Amended) A marine vessel comprising a bow section, a mid-section and a stern section, in which the mid-section has a curved outer shape and includes an inner section with one of framing means and longitudinal bulkhead means, said hull construction having outer shells supported on the inside thereof by a stainless steel light framing stiffener means for transmitting pressure loads, and ~~according to claim 7, wherein~~ the stiffener means is being connected with a respective outer shell of the mid-section by way of an elastomer and a fastening assembly that includes a stainless steel bolt embedded in the composite material of the respective outer shell that cooperates with a high strength spring prestressed by a nut.

9. (Original) A marine vessel according to claim 7, wherein said stiffener means is one of open box member or channel member.

10. (Original) A marine vessel according to claim 1, further comprising stainless steel beams embedded in the composite materials that are connected to an inner section of the mid-section that includes one of stainless steel box beams, framing means or bulkhead means.

11. (Currently Amended) A marine vessel, comprising a hull having a low block coefficient and including a bow section, a mid-section and a stern section, in which the starboard and port sides of the mid-section are also have outer shells of hybrid composites with light framing on the inside thereof, and in which the mid-section has a curved outer shape in the longitudinal direction so that, as viewed in transverse cross

section, the cross-section becomes smaller toward the bow and stern sections, and includes an inner section with one of framing means and longitudinal bulkhead means.

12. (Original) A marine vessel according to claim 11, wherein the inner mid-section includes a steel frame which, together with deck means and keel means, carries the sea loads.

13. (Original) A marine vessel according to claim 11, in which the mid-section includes inner longitudinal bulkhead means which are of one of conventional or modified double-hull construction.

14. (Original) A marine vessel according to claim 1, wherein said composite materials are one of E- or S-2 glass fiber composites.

15. (Original) A marine vessel according to claim 14, wherein the outer shells are supported on the inside thereof by a stainless steel light framing stiffener means for transmitting pressure loads.

16. (Original) A marine vessel according to claim 15, wherein the stiffener means is connected with a respective outer shell of the mid-section by way of an elastomer and a fastening assembly that includes a stainless steel bolt embedded in the composite material of the respective outer shell that cooperates with a high strength spring prestressed by a nut.

17. (Original) A marine vessel according to claim 16, further comprising stainless steel beams embedded in the composite materials that are connected to an inner section of the mid-section that includes one of stainless steel box beams, framing means or bulkhead means.

18. (Currently Amended) A marine vessel comprising a bow section, a mid-section and a stern section, in which the mid-section has a curved outer shape and includes an inner section with one of framing means and longitudinal bulkhead means, ~~according to claim 1, wherein~~ the mid-section ~~includes~~ including an inner section having upper and intermediate decks of metallic sandwich construction with a core of metal foams, stainless steel microtrusses, folded plates or honeycomb.

19. (Currently Amended) A marine vessel according to claim 4 14, wherein the mid-section includes an inner section having upper and intermediate decks made of composite materials similar to the composite materials used for the hull outer skin.

20. (Original) A hybrid catamaran comprising at least two pontoons connected by a cross structure of steel plating, whereby said pontoons each include a bow section, a mid-section and a stern section, and the hull of the mid-section includes one of a steel frame means with composite skin and of steel double-hull construction.